

Project
Vineyard Wind 1
Park City Wind (VW South Phase 1)
Vineyard Wind South - Phase 2
Sunrise Wind
South Fork Wind Farm
Bay State Wind
Revolution Wind
Mayflower Wind
Liberty Wind
Beacon Wind

Notes

- 1\ Emissions for construction and operation & maintenance phases based off of the best available information as of 011/
- 2\ Bay State submitted a PPA application to MA in 2019 but it has not been approved.
- 3\ As of February 2020, Mayflower Wind (804 MW) has a proposed PPA with MA pending approval with the DPU. Mayflc

Anticipated Energy Consumer	Construction (tons)		&M Annual (tpy)		Emissions Data Source Date
	NO _x	VOC	NO _x	VOC	
MA	3713	88	76	1.6	06/20/19
CT	4067	85.4	290	5.2	08/13/20
unknown	6906	147	419	7.4	07/28/21
NY	2147.2	50.4	21	0.45	09/09/21
NY	474	10.8	32.6	0.7	01/04/21
unaffiliated	4234.7	207.6	397.5	40.1	03/06/19
RI, CT	4124.1	85.4	28	0.4	05/27/20
MA (see note #3)	36,611	1,452	534	10.1	11/03/21
unknown	TBD	TBD	TBD	TBD	NA
BW1: NY / BW2: unknown	TBD	TBD	TBD	TBD	NA

TOTAL	62277	2126.6	1798.1	65.95
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3/2021.

ower is proposing to construct a 1,600 MW wind farm through the entire lease block.

Emissions Data Source & Comments
Vineyard Wind draft permit & fact sheet; WDA & cable, and Comments on draft permit
8/13/20 NOI; total construction emissions, not max year; emissions for WDA & cable
Emissions from VW south COP for 1200 MW windfarm (likely overestimate for air permit)
Emissions based on 9/9/21 NOI.
Emissions based on 1/4/21 application
Introductory presentation from Bay State; OCS source emissions only; EPA staff believe the O&M values may be overestimates
Post-NOI presentation (NOI estimates the same); O&M emissions estimated from a reported total; permit area emissions only
Emissions estimates based Appendix G of COP.
Vineyard Wind's other lease area furthest east
Newly unveiled project. Scope of project as it relates to air emissions is still undetermined

Brayton Power Point Power Station Emissions Offsets

Information from decision document on: <https://www.mass.gov/service-details/brayton-power-point-power-station-em>

Total available

NOx, rate-based*
VOC, rate-based**

NOx multiplier*
VOC multiplier

NOx, mass-based
VOC, mass-based

NOx offsets needed for Vineyard Wind construction
4455.6

* NOx offsets and multiplier differ from decision document discounted because of new NOx RACT limits (effective March 2020)

** The calculations spreadsheet and final decision document differ in terms of how many creditable VOC emissions are available (calculations spreadsheet suggests 43 tpy are available, whereas the decision document states 32 tpy are available)

issions-offsets

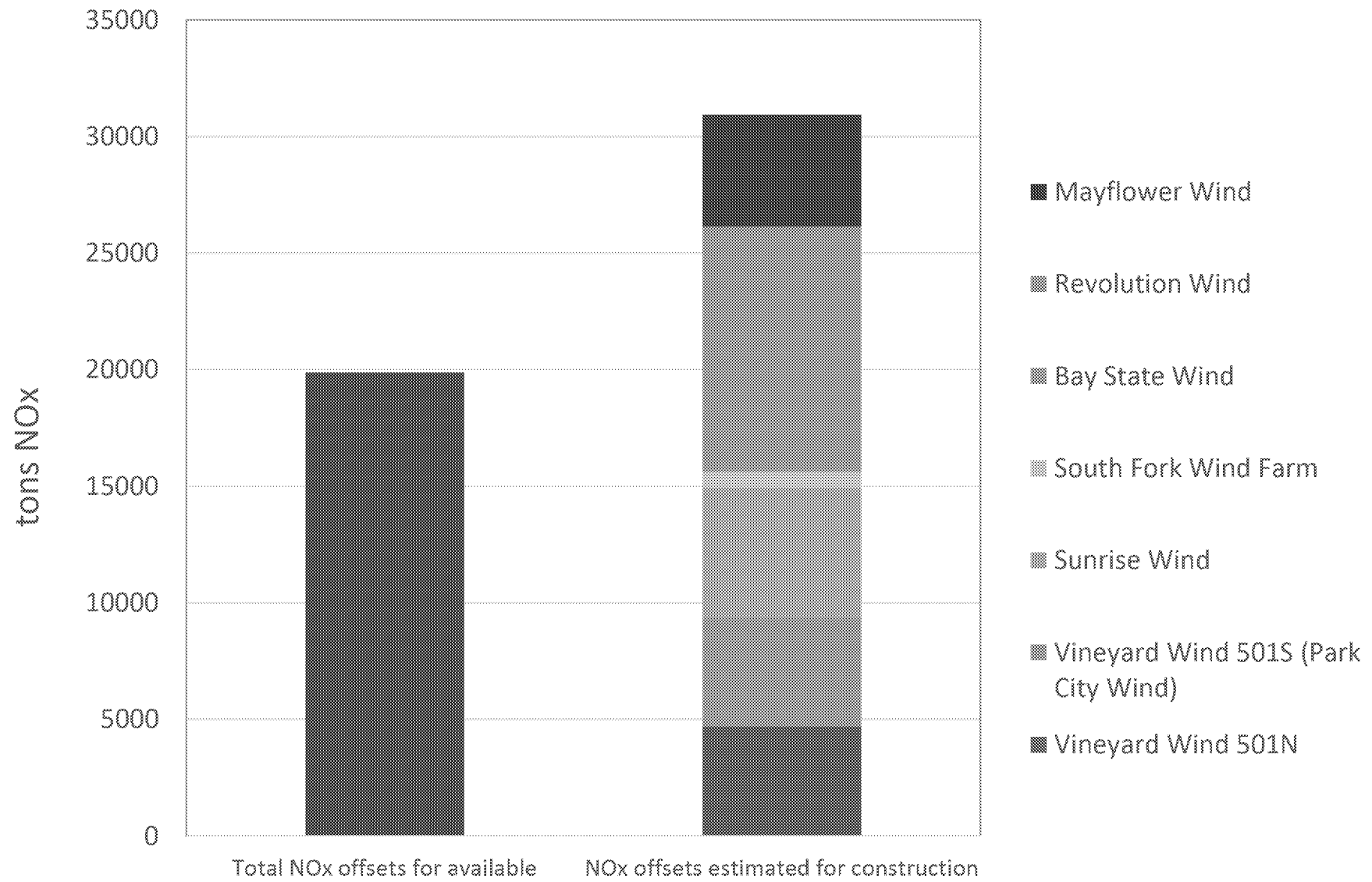
1360	tons per year
32	tons per year

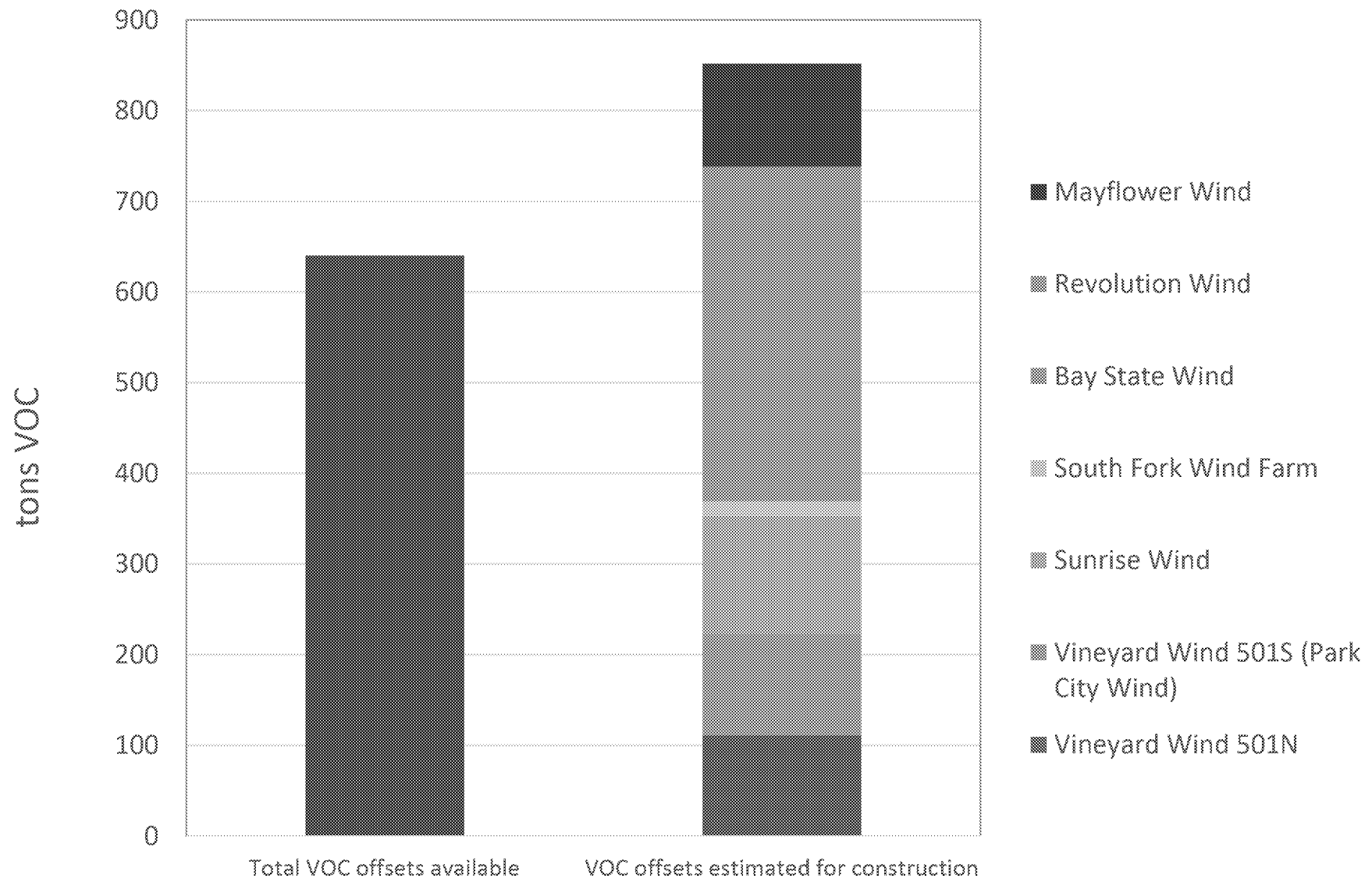
NOx offset ratio	1.2
VOC offset ratio	1.2

14.62
20

19883	tons
640	tons

NOx offsets needed for construction of all projects	VOC offsets needed for Vineyard Wind construction	VOC offsets needed for construction of all projects
74732.4	105.6	2551.92





Offset ratio NOx/VOC

1.26

Project	NOx		VOC	
	construction emissions (tons)	NOx Offsets estimated	construction emissions (tons)	VOC offsets estimated
Vineyard Wind 501N	3713	4678.38	88	110.88
Vineyard Wind 501S (Park City Wind)	3713	4678.38	88	110.88
Sunrise Wind	4406	5551.56	104	131.04
South Fork Wind Farm	560	705.6	13	16.38
Bay State Wind	4234.7	5335.722	207.6	261.576
Revolution Wind	4124.1	5196.366	85.4	107.604
Mayflower Wind	3809	4799.34	90	113.4
Total offsets for construction	NOx	26146.008	VOC	738.36

For chart configuration:

Project	NOx	
	offsets	estimated
Total NOx for		
offsets for constructi	available	on
Vineyard Wind 501N	19883	4678.38
Vineyard Wind 501S (Park City Wind)		4678.38
Sunrise Wind		5551.56
South Fork Wind Farm		705.6
Bay State Wind		5335.722
Revolution Wind		5196.366
Mayflower Wind		4799.34

Project	VOC	
	offsets	estimated
Total VOC for		
offsets for constructi	available	on
Vineyard Wind 501N	640	110.88
Vineyard Wind 501S (Park City Wind)		110.88
Sunrise Wind		131.04
South Fork Wind Farm		16.38
Bay State Wind		261.576
Revolution Wind		107.604
Mayflower Wind		113.4

Project
Vineyard Wind 1
Park City Wind (New England Wind)
Commonwealth Wind (New England Wind)
Sunrise Wind
South Fork Wind
Bay State Wind
Revolution Wind
Mayflower Wind
Liberty Wind
Beacon Wind
Total

1\ Emissions for construction and operation & maintenance phases based off of the best available information as of 7/28

2\ Bay State submitted a PPA application to MA in 2019 but it has not been approved.

3\ As of February 2020, Mayflower Wind (804 MW) has a proposed PPA with MA pending approval with the DPU. Mayflower

Construction (tons)		&M Annual (tp)	
<i>NOx</i>	<i>VOC</i>	<i>NOx</i>	<i>VOC</i>
3,713.0	88.0	76.0	1.6
8,463.0	176.0	329.0	6.0
2,147.2	50.4	192.1	4.5
474.0	10.8	32.6	0.7
4,234.7	207.6	397.5	40.1
4,124.1	85.4	28.0	0.4
39,964.0	1,589.0	729.0	13.0
TBD	TBD	TBD	TBD
TBD	TBD	TBD	TBD
63,120.0	2,207.2	1,784.2	66.3

3/2021.

owner is proposing to construct a 1,600

DO NOT EDIT
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